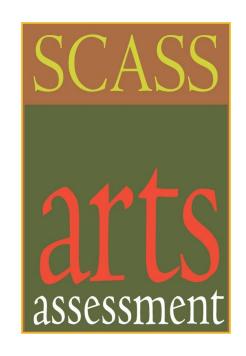
SCASS Arts Item Development Training Program

Created for SCASS Arts In 2001 Updated 2004 & 2007

SCASS Arts

State Collaborative on Assessment and Student Standards

Arts Education
Assessment Consortium



A project of
The Council of Chief State
School Officers

Overview

- Purposes/Goals of Training
- Materials, Definitions
- Item Pool History/Description
- Item Pool Review Process
- Item Development Process

Purposes/Goals of Training

- Provide a common set of training materials and experiences to participants
- Provide item development training for creating high-quality items for review
- Provide a rigorous on-line review process for items developed for the SCASS Arts Item
 Pool and secure state collections
- Provide a collection of reviewed items in an on-line Item Pool for use by SCASS Arts member states

Training Materials

- PowerPoint Presentation
- Item Development Training Manual
- Worksheets, checklists, & other handouts

Definitions

Item--a question, task, or other similar unit used as a part of an assessment of a student's knowledge or understanding

Selected-Response Item

 Any item in which a student chooses an answer(s) from given options

- Constructed-Response Item

 Any item which requires students to produce their own answers/responses

Examples of Selected-Response Items

- Multiple-choice
- True/false
- Matching
- Other items that give options from which to choose (select)

Examples of Constructed-Response Items

- Fill-in-the-blank
- Write an Essay (short or extended)
- Create a work of art, music, etc.
- Perform a dance, monologue, etc.
- Analyze a video or live performance
- Other items that require students to produce (construct) their own responses/answers

Stimulus Material

- Aural and/or visual media used as part of a selected-response or constructed-response item to elicit a response from students:
 - Examples include: art reproductions, audio clips, video clips, illustrations, photos or other graphic images, written selections, etc.

SCASS Arts Item Pool

Item Pool History/Description Item Review Process

Pre-Item-Pool History

- SCASS Arts members developed exemplars of constructed-response items aligned with National Standards; contributed to NAEP in the Arts
- Decision to capture and share what was learned though these experiences
- 1998 Summer Institute in Hidden Valley, Pennsylvania

Pre-Item-Pool History (cont.)

- Decision to create national Web-based SCASS Arts Item Pool
- Philosophical decisions and technical design of Web-based system took about two years
- Initial training and item development began in 2001

Item Pool Development

- First Phase—2001 & continuing
 - Selected-response (S-R) items:
 - multiple-choice S-R items only
 - items without stimulus materials

Item Pool Development

- Second Phase—2003 & continuing
 - Multiple-choice S-R items
 - without stimulus materials
 - with stimulus materials
 - Constructed-response (C-R) items
 - without stimulus materials
 - with stimulus materials

Item Pool Development

- Third Phase—2007 & continuing
 - Inclusion of secure state items
 - Multiple-choice S-R items
 - without stimulus materials
 - with stimulus materials
 - Constructed-response (C-R) items
 - without stimulus materials
 - with stimulus materials

Items in the Pool

- Cover all four arts areas
- Cover grades k-12
- Measure National Standards
- Range from basic knowledge to analysis, synthesis, creating, performing & responding
- Include both selected-response and constructedresponse items
- Include graphic, audio, and video stimulus materials

Items in the Pool

 have been constructed following Item Pool development criteria,

follow the Item Pool Style Guides, and

have been reviewed and deemed acceptable for the Item Pool by both content and assessment experts.

Item Review Process

- SCASS members & reviewers are trained
- SCASS members provide training to item developers in their states
- Item developers in member states work with SCASS representative(s) to draft items
- Working with the state SCASS representative(s), items are reviewed and revised until they are deemed ready for entry into the on-line review process

Item Review Process (continued)

- Member states enter items into the on-line review process
- Content area and assessment experts review items on-line
 - May approve item as is or make minor edits and approve
 - May return item for revision, with constructive comments
 - Item developer may revise and re-submit item
- Items approved by both content and assessment persons become available for 21 days for review by SCASS members

Item Review Process (continued)

- SCASS members may review items at their discretion
 - May approve item as is
 - May return item for revision, with constructive comments
 - May choose to review or not to review items or choose not to review items in certain content areas with which they may not be as familiar

Item Review Process (continued)

- Items approved by two SCASS members go into the Pool; items that have not been approved or returned for edits within 21 days, go into the Pool by default (very few items are in the Pool by default, and even items in the Pool can be deleted, if deemed necessary by SCASS)
- All items in the Pool can be used by member states; use is determined by the member state using the items; Pool items have not been field tested

Selected-Response Items

Creating Multiple-Choice Selected-Response Items for the Item Pool

SCASS Forms to Be Completed by Item Developers and Reviewers:

- Assignment of Copyright
- Release Form

The Training Process for Multiple-Choice S-R Items

- Description of process designed to develop highquality multiple-choice items
- Handouts for use in development process
- Examples of item problems and suggested improvements
- Opportunity for small-group hands-on practice including item de-construction and item development

Item Pool Multiple-Choice Item Format

Multiple-Choice Items Consist of:

- Stem, in question form if possible
- 4 options (A, B, C, & D)
 - 1 Key (correct answer)
 - 3 Distractors (wrong answers)

Stem Which of these rivers forms part

of the boundary between the

United States and Canada?

Options:

Distractor A. the Rio Grande River

Key B. the Saint Lawrence River

Distractor C. the Wisconsin River

Distractor D. the Mississippi River

The End Product

- The item must follow the Style Guide for item format:
 - stem with four options
 - stem in question form if possible
 - if not in question form, no colon, no blank
 - follow all other specifications on the Style Guide

Getting Started

Creating a Multiple-Choice Item for the Item Pool

Universal Design and Sensitivity Considerations

- Ethnicity
- Gender
- Age
- Disability
- Religion
- Rural/Urban
- Violence/Other inappropriate behavior
- Magic/Occult
- Geographic/Regional

(Continued)

- Cultural or Language Differences
- Gender Orientation/Sexual Orientation
- Economic Advantage/Disadvantage
- Controversial Points of View or Subject Matter
- Age Appropriateness
- Other

Item Needs Summary

- Dance
- Music
- Theatre
- Visual Arts

National Standards

- Theatre--8 standards
- Music--9 standards
- Dance-7 standards
- Visual Arts--6 standards

Items most needed— Beyond knowledge/recall:

- Comprehension
- Application
- Interpretation
- Analysis
- Evaluation

(more complex understanding may be better measured by constructed-response items, which will be addressed later)

Steps in Developing a Multiple-Choice Item for the Item Pool--

Step 1: National Standard & Grade Level and

Arizona Standard

Step 2: Information/Concept Focus of Item

Step 3: The Stem

Step 4: The Key

Step 5: The Distractors

Step 6: Key Descriptor

Step 7: Level (recall or beyond recall)

Step 8: Evaluate, Revise, and Finalize

Step 9: Worksheet for Indicating Stimulus

Item Title

- Short, descriptive title for Item Pool
 - Examples:

Jazz Dance Origins; Chance Dance; Cultural Influences Frida Kahlo; Additive Color System in Electronic Media; etc.

May be easier to do after the item has been completed

Criteria for Creating & Evaluating Multiple-Choice Items--

Significance

Technical Qualities

Significance--

The item . . .

- relates directly to a National Standard & Arizona Standard
- 2. deals with information/concept of importance Problem Item:

How many lakes make up the Great Lakes?

- A. two
- B. three
- C. four
- D. five (Key)

Why are the Great lakes most likely of increasing interest to the people of Southern California?

- A. because they want to sail their boats on the Great Lakes in the summer
- B. because they view the Great Lakes as a potential source for fresh water (Key)
- C. because they need fish from the Great Lakes to have enough food
- D. because they would like to harvest ice from the Great Lakes in the winter

3. is tightly focused so that it will be clear why a student gets it right or wrong

Problem Item:

Which of these cities is the largest city located on Lake Michigan?

- A. Chicago (Key)
- B. Duluth
- C. Milwaukee
- D. Detroit

Which of these cities is the largest city located on Lake Michigan?

- A. Chicago (Key)
- **B.** Manitowoc
- C. Milwaukee
- D. Racine

OR . . .

Which of these large cities is located on Lake Michigan?

- A. Chicago (Key)
- **B.** Detroit
- C. Minneapolis
- **D. Montreal**

- 4. If beyond recall, asks students to use higherorder thinking skills such as:
- Comprehending an important concept or information
- Applying a concept/skill to a different situation
- Making an interpretation/drawing a conclusion or comparing/contrasting concepts or information
- Analyzing and/or evaluating a claim or generalization
- •etc.

Problem Item:

Which of these large cities is located on Lake Michigan?

- A. Chicago (Key)
- **B.** Detroit
- C. Minneapolis
- **D. Montreal**

Why did Chicago's location on Lake Michigan at the mouth of the Chicago River contribute to its rapid growth in the early 1800's?

- A. Year-round mild climate conditions near the water made people want to live there.
- B. The area was protected by the water from nearly all types of natural disasters.
- C. Most long-distance transportation of goods and people was by water. (Key)
- D. Land was less expensive near the water than it was farther away from the lake.

Technical Qualities--

1. The stem is a complete question or statement; the intent of the stem is clear without reading the options.

Problem Item:

George Washington was the American who

- A. led the colonial army against the British. (Key)
- B. wrote the Declaration of Independence.
- C. fired the first shot in the Revolutionary War.
- D. organized the Boston Tea Party.

What was George Washington's most important role during the American Revolution?

- A. He led the colonial army against the British. (Key)
- B. He wrote the Declaration of Independence.
- C. He fired the first shot at Concord.
- D. He organized the Boston Tea Party.

2. Information in the stem does not cue the key.

Problem Item:

Which of the following documents was written to guarantee certain rights to American citizens?

- A. Emancipation Proclamation
- **B.** Articles of Confederation
- C. Bill of Rights (Key)
- D. Declaration of Independence

Which of the following documents was intended to increase the likelihood that states would approve the adoption of the United States Constitution?

- A. Emancipation Proclamation
- **B.** Articles of Confederation
- C. Bill of Rights (Key)
- **D.** Declaration of Independence

- 3. Negative stems are avoided.
- 4. There is one and only one clearly correct answer, and the key is indicated.
- 5. The position of the key is varied.
- 6. All distractors are plausible, yet incorrect.
- 7. Overlapping options are avoided.

Problem Item:

When was slavery abolished in the United States?

- A. after the American Revolution
- B. after the War of 1812
- C. after the Mexican War
- D. after the Civil War (Key)

When was slavery abolished in the United States?

- A. in 1787, by the U.S. Constitution
- **B.** in 1814, by the War of 1812 Treaty
- C. in 1848, by the Treaty of Guadalupe-Hidalgo
- D. in 1865, by the 13th Amendment (Key)

8. Options are parallel in concept, language structure, and appearance.

Problem Item:

Which is the best example of an actor improvising lines?

- A. an actor memorizes the lines in the script and says them exactly as written
- B. using movement and facial expression without speaking any lines
- C. cue cards concealed from the audience
- D. the actor created appropriate lines and delivered the lines as the scene developed (Key)

Which is the best example of an actor improvising lines?

- A. The actor memorizes the lines in the script and says them exactly as they are written.
- B. The actor uses movement and facial expression without speaking any lines.
- C. The actor reads lines from cue cards that are concealed from audience members.
- D. The actor creates appropriate lines and delivers the lines as the scene develops. (Key)

- 9. Options are of equal or nearly equal length.
- 10. Language usage and grammar in the stem and options are correct.
- 11. The stem and options fit correctly/ appropriately with each other, grammatically and conceptually.

12. Complex formats in the stem, options, and overall item are avoided.

Problem Item:

Which of the following levels of government may levy taxes?

- I. Local government
- II. State government
- III. Federal government
- A. I and II only
- B. I and III only
- C. II and III only
- D. I, II, and III (Key)

In the United States, which of the following can local, state, and federal government do?

- A. issue postage stamps
- **B.** print money
- C. declare war
- D. levy taxes (Key)

13. Repetitive language in the stem and the options is avoided.

Problem Item:

What did the Jamestown colonists eventually do to make their settlement financially successful?

- A. The colonists began to build faster ships to cross the Atlantic Ocean.
- B. The colonists began to grow a crop that they could export to England. (Key)
- C. The colonists moved their settlement closer to Plymouth Colony.
- D. The colonists began to sell manufactured goods to France.

What did the Jamestown colonists eventually do to make their settlement financially successful?

- A. built faster ships to cross the Atlantic Ocean
- B. grew a crop for export to England (Key)
- C. sold manufactured goods to France
- D. moved closer to Plymouth Colony

- 14. Superfluous wording in the stem and the options is avoided.
- 15. The item conforms to the SCASS Item Pool Style Guide for Item Format.
- 16. The use of "all of the above" and "none of the above" as options is avoided.
- 17. Items are independent to the extent possible; distractors are not used in more than one item.

Using Stimulus Materials

Multiple-Choice Selected-Response Items with Stimulus Materials

Types of Stimulus Material

- Written/Quote
- Music Notation
- Audio
- Arts Reproduction
- Photograph
- Video

Selection of Stimulus Materials

- Four concerns
 - Copyright ownership
 - Relevance/appropriateness to item
 - Technical quality & artistic merit
 - Technical specifications

Sources of Stimulus Material (that address the four concerns)

- SCASS Arts collections
- Stimulus material already in the Item Pool

Developing M-C Items with Stimulus Materials

- Follow the same guidelines and procedures for developing high quality multiple-choice items without stimulus material
- Stimulus material must accompany item in review process

Forms to Use

- Worksheet for Creating a Multiple-Choice Item
- Worksheet for Indicating a Stimulus Used in an Item
- Checklist for Creating and Evaluating Multiple-Choice Items
- Style Guide for Multiple-Choice Items

Style Guide for Multiple-Choice Items

Style Guide includes format examples for multiple-choice items with stimulus material **EXAMPLE** (format of multiple-choice item with a graphic image as stimulus):

The painting shown below is an example of which artistic movement?

- A. (distractor)
- B. (distractor)
- C. (key)
- D. (distractor)

EXAMPLE (format of multiple-choice item with two graphic images as stimuli):

Which of the statements below accurately describes how composition is used in each of these two paintings to show relative distance?

- A. (distractor)
- B. (distractor)
- C. (key)
- D. (distractor

EXAMPLE (format of multiple-choice item with audio clip as a stimulus):

Read the question and the four answer choices below. A 10-second audio clip of a music performance will be played. The audio clip will be repeated so that you can hear it twice before you answer the question.

Which of the following is an accurate critique of the music performance just played?

- A. (distractor)
- B. (key)
- C. (distractor)
- D. (distractor)

[Test administrator plays audio clip, pauses, repeats audio clip.]

Constructed-Response Items

Creating Constructed-Response Items with or Without Stimulus Material

Constructed-Response Items can be used:

- when selected-response items can't be written to capture a particular concept
- to measure Standards that are difficult or impossible to measure with selectedresponse items
- to measure higher levels of understanding such as evaluation, synthesis, etc.

Constructed-Response Items Most Needed—Beyond Knowledge/Recall

- Comprehension
- Application
- Interpretation
- Analysis
- Evaluation
- Synthesis
- Creating, performing, & responding

Universal Design & Sensitivity Considerations

- Ethnicity
- Gender
- Age
- Disability
- Religion
- Rural/Urban
- Violence/Other inappropriate behavior
- Magic/Occult
- Geographic/Regional

(Continued)

- Cultural or Language Differences
- Gender Orientation/Sexual Orientation
- Economic Advantage/Disadvantage
- Controversial Points of View or Subject Matter
- Age Appropriateness
- Other

Item Needs Summary

- Dance
- Music
- Theatre
- Visual Arts

National Standards—

- Theatre--8 standards
- Music--9 standards
- Dance-7 standards
- Visual Arts--6 standards

Steps in Developing a Constructed-Response Item for the Item Pool--

Step 1: National Standard & Grade Level and Arizona Standard

Step 2: Information/Concept Focus of Item

Step 3: The Task

Step 4: Materials/Setup

Step 5: Directions & Script for Administrators

Step 6: The Stem

Step 7: The Scoring Criteria

Step 8: Key Descriptor

Steps in Developing a Constructed-Response Item for the Item Pool--

(continued)

Step 9: Level (recall or beyond recall)

Step 10: Stimulus Materials

Step 11: Evaluate, Revise, and Finalize

Step 12: Worksheet for Indicating Stimulus

Item Title

- Short, descriptive title for Item Pool
 - Examples:

Jazz Dance Origins; Chance Dance; Cultural Influences Frida Kahlo; Additive Color System in Electronic Media; etc.

May be easier to do after the item has been completed

Example-- Theatre Set Design Item

Task Description

Students will be asked to sketch a set design for a play based on the description of the set from a script.

Materials/Equipment/Set Up

Script [title of play given and copyright previously secured]; desks and chairs for all students; sketching paper and pencils for all students; desks should be arranged so students can work individually and without distractions

Example-- Theatre Set Design Item

Script and Directions (partial)

[Distribute a copy of the set description to each student.]

Today you are going to have an opportunity to demonstrate your ability to design a set for a play.

At the top of the sheet which I have given you, you will see a brief description of the setting for a one-act play [title/author given]. Please take five minutes now to read the description.

[Allow students five minutes to read the description.]

Example--continued

Script and Directions (partial)

Now that you have read the description of the setting of this play, you will have 45 minutes to sketch a set design, using the paper and pencil I will give you.

This is a rough sketch, not a finished work of art. Please show in your sketch the necessary things the set design should have and where they should be located, based on the description you read. Your may re-read the description as many times as you wish. You may use extra paper for planning. Are there any questions?

[Answer procedural questions only. Allow 45 minutes for students to complete their sketches independently.]

Example--continued **Stem**

Please read the following description of the setting of the play [title/author given]. You will be sketching a set design later based on this description. You will have 5 minutes to read the description now, but you may re-read it later as many times as you wish.

[Description of setting of play would appear here]

You will have 45 minutes to sketch a set design, using the paper and pencil given to you.

This is a rough sketch, not a finished work of art. Please show in your sketch the necessary things the set design should have and where they should be located, based on the description you read. Your may re-read the description as many times as you wish. You may use extra paper for planning. Are there any questions?

Example--continued **Scoring Criteria**

- 4 The sketch has all the scenic details from the description included and properly placed.
- 3 The sketch has all the scenic details from the description included, but one or more are not properly placed.
- 2 The sketch is missing only one of the scenic details. Of the details included, all are properly placed.
- The sketch is missing more than one of the scenic details, but the scenic details that are included are properly placed; or the scenic details are included but none are properly placed.
- No sketch is present. Or a sketch is present that does not include any accurate details or placement. Or a sketch is presented that does not attempt to create a set design.

Scoring Criteria for Item Pool

- Scale of 0, 1, 2, 3, 4, with 4 the highest score
- Criteria for a 4 should describe what constitutes complete response(s); credit cannot be given for things that were not asked for
- Criteria for a 1 should describe what are the minimally acceptable responses
- Criteria for 2 and 3 should clearly describe levels of quality of responses between 1 and 4

Scoring Criteria (cont.)

- Avoid descriptors such as few, the majority, etc., without defining what these descriptors mean
- Be precise; what is scored must match what was asked, no less and no more



By looking at the photo below, identify three things you can project about this play with regard to the time period, presentational style, theatrical genre, etc. Support your statements with observations from the photo. (5 minutes)

[Note: additional lines provided for student response, but not reproduced here]

Possible Improvements

Use the picture below to answer these three questions:

What is the time period of the play?

What is the theatrical genre of the play?

What information in the picture helps communicate the time period and the theatrical genre? _____ [+ more lines]

Example criteria for a score of 4 for the example item:

4 = Accurately describes the time period, theatrical genre of the play shown in the photo and gives accurate information from the photo that indicates the time period and theatrical genre

[Note--the possible accurate responses then would have to be carefully described, and either listed separately or within the score point description, which ever would be easier for a scorer to use]

Example: First Draft Constructed-Response Item with Stimulus (see Training Manual for Photo)

Using this same prompt, comment on which actor has the focus in this picture and why? (5 minutes)

[Note: additional lines provided for student response, but not reproduced here]

Possible Improvements

In the picture below, which actor has the focus and why? (5 minutes)

[+ more lines]

Example: First Draft Constructed-Response Item with Stimulus (see Training Manual for Photo)

By analyzing the set design above, what inferences may be drawn about this play and the characters portrayed in this scene? What do you see in this drawing that leads you to these conclusions? Consider social status, theatrical genre, historical era, etc.

[Note: additional lines provided for student response, but not reproduced here]

Possible Improvements

Inferences can be drawn about the play from looking at the set design below. In essay form, describe those inferences, including in your answer the type of set, era, social class, and mood. Support your answers with specific observations from the drawing.

<u>[+ more lines]</u>

Example criteria for a score of 4 for the example item:

4 = The response clearly, coherently, and insightfully analyzes the scenic designer's rendering, supporting the inferences with specific observations from the drawing. The response accurately addresses and supports inferences regarding all four of the aspects as described above.

[Note--the four aspects are: type of set, era, social class, and mood. Each aspect is described in the scoring criteria.]

One aspect (era) defined as part of scoring criteria:

Era--As long as the answer is supported accurately, the response could be: Victorian, 1800s, early 1900s, or 1700s; possible references include style of dress, style of furniture, use of candles, ceiling height

[Note--the four aspects (type of set, era, social class, and mood) are described in the scoring criteria.]

Evaluating the significance and technical qualities of the item and the scoring criteria

- Relates to a National Standard and an Arizona Standard
- Measures important concept, not trivia
- Is tightly focused—if the student scores low, will it be clear why?
- Measures higher-level thinking—beyond recall
- Addresses universal design/sensitivity

Evaluating the item (cont.)

- Stem clearly communicates what the student must do
- Information in stem doesn't cue answer
- Negatives in stem are avoided
- There is at least one plausible response
- The task is manageable within the timeframe
- The format is user-friendly and helps the student through the item

Evaluating the item (cont.)

- Language usage and grammar are clear, concise, and correct
- If there is a stimulus, it must be adequate and appropriate to the stem and meet the Item Pool specifications
- Scoring criteria are complete and unambiguous

Evaluating the item (cont.)

- A brief description of the task is given
- Any special materials, equipment, setup are described
- If applicable, directions and a script for administering the item are provided (needed for items that are other than short constructed-response items)

Precise C-R items and scoring criteria contribute to:

- Inter-rater agreement
- Intra-rater agreement
- Validity of scores

Which all contribute to:

 Scores that give students, teachers, and parents feedback that is reliable.